

*Hygrorhiza aristata* (Retz.) Nees ex W. & A. in Edinb. New Phil. J. 15: 380. 1833; Cooke in Fl. Pres. Bombay 2: 1041. 1908. *Pharus aristata* Retz. Obs. 5: 23. 1789.

Cooke (l.c.) has recorded this plant from Chikli (Gujarat) only and Gamble (1915-36) records from both the coasts down south. The present report from the Kolaba district in Maharashtra State thus bridges the gap in its distribution.

An attractive aquatic grass with purplish, handsome swollen leaf-sheaths and greenish-yellow spikelets; worth introducing in gardens in shallow ponds.

*Fl. & Fr.*: December-March.

BOTANICAL SURVEY OF INDIA,  
WESTERN CIRCLE, PUNE,  
May 7, 1981.

*Locality*: Gavalwadi pond, Karjat 154503.  
*Oldenlandia biflora* L. Sp. Pl. 119. 1753; Hooker in Fl. Brit. India 3: 70. 1897.

Cooke (1901-08) has not recorded this species from Maharashtra State. Gamble (l.c.) also notes its infrequent occurrence on the W. coast and it was also represented from Lakshadweep (Laccadives) in BSI. Therefore, its present record from Maharashtra State is the first one from the State.

A branched succulent herb with white flowers. A rare plant growing on moist-moss covered rocks near sea-shores.

*Fl. & Fr.*: September-October.

*Locality*: Murud 147855.

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#### REFERENCES

COOKE, T. (1901-1908): The Flora of the Presidency of Bombay, Vol. 1 & 2, London.

GAMBLE, J. S. & FISCHER, G. E. C. (1915-36):

Flora of the Presidency of Madras. Parts 1-11. London.

### 37. THE GENUS *DESCHAMPSIA* IN N. W. HIMALAYA

*Deschampsia* belongs to the tribe Aveneae of Poaceae. It has about 60 species distributed mostly in temperate regions. In India the genus is represented by two species *D. caespitosa* and *D. koelerioides*. Both occur in the North Western Himalayan region at an altitude of about 4000 m. The plants have golden brown or purplish green shining spikelets and may prove worthy of introduction in alpine gardens. A third species *D. flexuosa* occurs in Nepal and may be expected in India. [Santapau & Henry (Dictionary 53, 1973) while dealing with the genus mention the occurrence of three species in India].

Type species — *Deschampsia caespitosa* (L.) P. Beauv. = *Aira caespitosa* L.

*Deschampsia* P. Beauv., Ess. Agrost. 91. t. 18. f. 3. 1812; Hook. f. Fl. Brit. Ind. 7: 273. 1897; Bor Grasses Burm. Cey. Ind. & Pak. 435. 1960.

Perennials. *Culms* ascending, glabrous; sheaths glabrous, striate. *Leaves* mostly basal, glabrous, acute; ligule membranous. *Inflorescence* contracted or spreading panicle, shining. *Spikelets* usually 2-flowered; rachilla produced, pilose, breaking up above the glumes. *Glumes* hyaline, equal or sub-equal, longer than the lemmas. *Lemmas* broad, toothed or lobed, awned on the back; callus hairy. *Paleas* shorter than the lemma, 4-toothed, Anthers 3. Styles 2. Lodicules 2.

MISCELLANEOUS NOTES

KEY TO SPECIES

1. Inflorescence much spreading ..... *D. caespitosa*  
 1a. Inflorescence contracted ..... *D. koelerioides*

***D. caespitosa*** (L.) P. Beauv., Ess. Agrost. 91. 160. 1812; Hook. f. Fl. Brit. Ind. 7: 273. 1897; Bor, Grass. Burma, Cey., Ind. & Pak. 435. 1960; Stewart, Fl. West Pakistan 136. 1972; Kachroo *et al.* Fl. Ladakh 157. 1977.

Perennial grasses. Culms glabrous, curved at the base; sheaths scarious margined. Leaves linear  $\pm$  25 cm x 2.5 mm wide; ligule  $\pm$  4 mm long, toothed, Inflorescence a spreading panicle, shining purplish; rachis distantly scabrid. Spikelets pedicelled, usually 2-flowered; rachilla produced, pilose. Lower glume  $\pm$  4 mm long, ovate-elliptic. Upper glume  $\pm$  5 mm long, boat-shaped, broader than the lower glume. Lemma  $\pm$  3.5 mm long, broad, toothed or 4-lobed awned; awn basal to median, nearly equalling the lemma, hardly visible beyond the glumes. Palea shorter than the lemma- 4-toothed. Anthers 3,  $\pm$  2 mm. long. Ovary brownish. Ecological note:

Fairly common, on moist, sandy stream beds mainly in drier W. Himalayan region, 2800-4400 m.

*Specimens examined*: Himachal Pradesh — Kinnaur; Between Chitral & Ranikanda, 3400 m., 29.9.1964, N.C. Nair 34393. (BSD), Kulu: Manali 2800 m, 2.8.1941, Kirat Ram 15586 (DD). Lahul & Spiti: Rohtang Pass, 3950 m., N. L. Bor 11939 (DD); Thumla, 4200 m. 1.8.1972, U. C. Bhattacharyya 49210 (BSD). Jammu & Kashmir-Ladakh: Chushul, 4329 m. 26.7.1931, W. Koelz 2447b (DD.) Uttar Pradesh-Kumaon: Ralam Valley, 3800 m. 23.8.1884. J. F. Duthie 3549 (DD), 3550 (CAL); Tehri: Kharga Ka gadh, 3950 m.

BOTANICAL SURVEY OF INDIA,  
 NORTHERN CIRCLE,  
 DEHRA DUN,  
 May 26, 1981.

8.8.1883, J. F. Duthie 268 (DD); Uttarkashi: Nila Valley 3900 m. 16.8.1883, J. F. Duthie 290 (CAL).

***D. koelerioides*** Regel in Bull. Soc. Nat. Mosc. 41: 299. 1868; Hook. f. Fl. Brit. Ind. 7: 273. 1897; Bor Grasses Burm., Cey., Ind. & Pak. 435. 1960; Stewart, Fl. West Pakistan 136. 1972; Kachroo *et al.* Fl. Ladakh. 157. 1977 Rhizomatous. Culms glabrous. Leaves  $\pm$  6 mm x 3 mm., glabrous, acute; ligule  $\pm$  3 mm. long. Inflorescence contracted, shining purplish green; rachis distantly scabrous. Spikelets pedicelled, usually 2-flowered; rachilla produced, long hairy. Lower glume  $\pm$  3 mm. long, lanceolate, acute. Upper glume  $\pm$  4 mm. long, ovate-elliptic, acute. Lemma  $\pm$  3 mm long, oblong, toothed or lobed, awned; awn basal to median, not or slightly visible beyond the glumes. Palea shorter than the lemma, 4-lobed. Anthers 3,  $\pm$  1.2 mm long.

Except in the compact nature of the inflorescence, this species cannot be distinguished from *D. caespitosa*. Population study of both the species may prove these to be variant forms of one species. Since locating this species is a matter of chance, very intensive field observation and biosystematic study are necessary to establish specific identity of *D. koelerioides*.

*Ecological note*:

On wet sand around boulders. Rare. Though it has been stated to be common, the representation of this species from the Indian region is very poor in DD herbarium and at CAL.

*Specimens examined*: Jammu & Kashmir-Ladakh: Gomburangzang, Kargiakh Cho, 4500 m, 24.7.1973, U. C. Bhattacharyya 52200 (BSD, CAL).

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